



AFS Safety Assurance System (SAS) Overview

Glossary and Acronym List

This document lists and defines many SAS acronyms and terms. This is not intended to be a complete list of terms and definitions.

TERM	DESCRIPTION
AFS SAS	The Flight Standards (AFS) Safety Assurance System – The people, processes, and technology that will be the safety assurance system for AFS. In 2015, the AFS SAS will be the new oversight system for 14 CFR Parts 121, 135, and 145, and will eventually be used for all other CFR Parts.
ASIAS	The Aviation Safety Information Analysis and Sharing – system connects 46 safety databases across the industry and is integrated into the Commercial Aviation Safety Team (CAST) process.
Analysis, Assessment and Action	Will support principal inspectors (PIs) in determining the adequacy of the certificate holder's design and the effectiveness of their performance and help PIs select the appropriate actions to be taken.
Assessment Plan	A rolling plan documenting the risk-prioritized Design Assessment (DA) and Performance Assessment (PA) activities associated with each certificate holder.
ASTARS	AFS Staffing Tool and Reporting System (AFS-170) – Established by AFS to assist in identifying safety critical positions and support staff to manage the organization's national annual staffing requirements.
ATOS	Air Transportation Oversight System – ATOS is the system the FAA uses to provide regulatory oversight of 14 CFR Part 121 air carriers. (FAA Order 8900.1) ATOS provides a systematic process for conducting surveillance, identifying and managing risks, and providing data and analysis to guide in the oversight of an air carrier.
AVS Services and Offices	Services and offices within the Office of Aviation Safety (AVS) which include the Flight Standards Service (AFS), the Aircraft Certification Service (AIR), the Air Traffic Safety Oversight Service (AOV), the Office of Aerospace Medicine (AAM), the Office of Rulemaking (ARM), the Office of Quality, Integration and Executive Services (AQS), and the Office of Accident Investigation and Prevention (AVP).
AVSSMS	The Office of Aviation Safety's Safety Management System – The AVSSMS will allow AVS to better integrate its own regulatory efforts and safety practices, both internally and with those of other FAA services / offices such as Airports and ATO. AVSSMS will help AVS anticipate safety hazards, correct deficiencies in existing operations and oversight activities, and ensure regulatory requirements are established to effectively mitigate safety risk.
BPR	Business Process Reengineering
Certificate Holder Analysis	The evaluation of specific operations, environment and performance history of the certificate holder. This analysis, coupled with data from the NSA, establishes the risk profile for the operator and provides a baseline for targeting inspection resources on those areas of the certificate holder operations that present the greatest safety risk.

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Certificate Holder Configuration Data	A set of unique characteristics or attributes that define what an operator or applicant does. For example, data such as route structure, fleet type, fleet size, domestic vs. international operations; ETOPS, etc. are types of configuration data.
Certificate Holder Data Collection Tools	The actual DCTs (i.e., inspection questions) an inspector would use for a specific certificate holder. They are considered “specific” because they are tailored to the particular certificate holder operations, so only applicable questions are asked.
Certificate Holder Operating Profile	A listing of all of the associated functions the certificate holder performs, along with applicable specific regulatory requirements (SRRs), corresponding Hazards Analysis, certificate holder configuration information, and previous performance history.
Certificate Holder Risk Profile	Describes the hazards, controls, and level of risk for each certificate holder’s unique functions.
Certificate Holder SMS	Certificate Holder Safety Management System – A SMS implemented by a certificate holder to take increased responsibility for their own safety.
CFR	Code of Federal Regulations for Aeronautics and Space (CFR and FAR can be used interchangeably)
CFR Part 121	Domestic, Flag, and Supplemental Operations
CFR Part 135	Commuter and On-Demand Operations
CFR Part 145	Repair Stations
CHAT	Certificate Holder Assessment Tool – CHAT is an ATOS planning tool designed to analyze and assess the elements of an air carrier’s systems using a series of risk indicators.
CMI	Change Management & Implementation
Component	As part of the Master List of Functions, components are groupings within an element that represent the series of tasks required to perform an operational procedure (e.g., <i>Generate Records</i>).
DA	Design Assessment – An activity to ensure that a certificate holder’s system design meets regulatory requirements and safety standards in accordance with 49 USC, 14 CFR, and FAA policy.
Data Collection (Surveillance)	Will support inspectors in conducting inspections and surveillance of certificate holder’s design and performance. Data collection will support both DAs and PAs.
Data Collection Tool Library	A national-level library including Data Collection Tools (DCTs) relevant to all operations. It will include all requisite guidance, Handbooks and other job aids. SAS DCTs will be used to evaluate the adequacy of a certificate holder’s design and the effectiveness of a certificate holder’s performance.

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DCT	Data Collection Tools – Tools used by ASIs to record observations in an objective and repeatable manner that support Design Assessments (DAs) and Performance Assessments (PAs).
Element	As part of the Master List of Functions, elements are groupings within a sub system that signify the complete set of operational processes in a certificate holder's sub system (e.g., Manage Documentation). In ATOS, elements are the level at which SAIs and EPIs are applied to Part 121 carriers.
ETOPS	Extended Operations (usually twin-engine aircraft over oceans)
FAA Order 8000.369	Order that provides guidance for implementation of a common Safety Management System within the FAA.
FAA Order VS 8000.367A	Order that provides requirements to be met by AVS and AVS services/offices in support of the AVSSMS. Order VS 8000.367A fulfills the requirement described in Order VS 8000.1, Safety Management System (SMS) Doctrine, Section 1-1.c.(2).
FAA Order VS 8000.370	Order that establishes the Safety Policy for the Office of Aviation Safety (AVS) which is applicable to all AVS Services and Offices and all AVS employees.
Hazard	Anything, real or potential, that could make an accident happen, or contribute to making an accident happen.
Hazards Analysis	Once a hazard is identified, the associated safety risk is analyzed and assessed. Identified hazards with unacceptable risk require the development of a risk control/mitigation plan. This is the process prescribed for hazards identified at the national or aviation system level; individual certificate holders are required to conduct similar processes specific to their individual operations and environment.
IWP	Individual Work Plan – A rolling plan documenting the risk-prioritized Design Assessment (DA) and Performance Assessment (PA) activities for each Inspector. The IWP includes estimates of resources necessary to complete each activity and includes other Inspector activities such as training and office duties.
Key Site	A site selected to test software and training as part of the development cycle.
Master List of Functions	A hierarchical list of all the possible functions a 121, 135, or 145 certificate holder could perform.
National Safety Analysis (NSA)	Will identify hazards and evaluate associated risks and risk controls at a national level.
NextGen	Next Generation Air Transportation System – NextGen is a transformation of the National Airspace System (NAS), including our national system of airports, using 21st century technologies to ensure future safety, capacity and environmental needs are met. NextGen will be realized through coordinated efforts by the FAA and the Departments of Transportation, Defense, Homeland Security, and Commerce, as well as NASA and the White House Office of Science and Technology Policy.

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NPG	National Program Guidelines – The guidelines used to plan surveillance programs. (From 8900.1, volume 6). Since 1985, FAA has used NPG, which includes both required and planned inspections, as its primary means of ensuring that operators comply with safety regulations. In NPG, an FAA committee of program managers identifies an annual minimum set of inspections required to ensure that operators are in compliance with their operating certificates. In addition, inspectors determine annual sets of planned inspections based on their knowledge and experience with the particular airlines they oversee. Since the implementation of ATOS, the oversight of 14 CFR Part 121 operators has not been included in NPG.
OpSpecs	Operations Specifications – A legal agreement between the certificate holder and the FAA as to how they propose to comply with FAA regulations. Required of all air operators and air agencies.
OPT	Oversight Prioritization Tool – The OPT is used for air carrier contract surveillance planning. It allows for prioritization among contract maintenance providers and is recommended to be utilized during the surveillance planning cycle. This tool will assist the principal inspector (PI), other assigned inspectors, supervisors, and managers in identifying areas of concern or criticality about contract providers and target resources toward the highest priority contract maintenance providers (FAA Order 8900.1, volume 6).
PA	Performance Assessment – An activity to ensure that an approved or accepted certificate holder system performs as intended.
PASS	Professional Aviation Safety Specialist
Planning and Resource Allocation	Will support managers and supervisors in assigning resources to data collection activities based on oversight priority.
PTRS	Program Tracking and Reporting Subsystem – A comprehensive information management and analysis system used in many AFS job functions. It provides the means for the collection, storage, retrieval, and analysis of data resulting from the many different job functions performed by Aviation Safety Inspectors in the field, the regions, and headquarters. This system provides managers and inspectors with current data on airmen, air agencies, air operators, and many other facets of the air transportation system. (From PTRS Manual)
Risk	An expression of the probability and impact of an undesired event in terms of event severity and event likelihood.
Risk Control	Steps taken to eliminate hazards or to mitigate their effects by reducing severity and/or likelihood of risks associated with those hazards.
RSAT	Repair Station Assessment Tool – Used for both surveillance planning and evaluation assessment. This tool helps the Principal Inspector, other assigned inspectors, supervisors, and managers identify areas of concern or criticality about a specific repair station, and target AFS resources for use in the areas of highest risk (FAA Order 8900.1, volume 6).

TERM	DESCRIPTION
SAS	Safety Assurance System
SASO PO	System Approach for Safety Oversight Program Office (AFS-900) – Established by AFS to develop and implement a comprehensive system safety approach to the oversight of all aviation entities.
Scoping	Scoping is an automatic process that will occur in the SAS to tailor oversight for each certificate holder. It allows the SAS to use certificate holder configuration data to conduct oversight for a large 14 CFR Part 121 operator such as United Airlines down to the smallest of the 14 CFR Part 145 certificate holders.
SMS	Safety Management System – An integrated collection of processes, procedures, and programs that ensures a formalized and proactive approach to system safety through risk management. (FAA Order 8000.369, Appendix A)
SPAS	Safety Performance Analysis System – SPAS is an Intranet-based application that contains a series of almost forty integrated databases and data processing utilities that acquire, analyze and distribute a broad range of safety information for use by FAA inspectors, analysts, investigators and managers in oversight decision making. SPAS interfaces with key AFS oversight programs, such as the National Program Guidelines (NPG) and the Air Transportation Oversight System (ATOS), the National Program Guidelines (NPG), as well as other government data sources to collect safety related performance and operational data, analyze and summarize the data, and provide critical safety information in the form of graphs, tables, and reports.
SRR	Specific Regulatory Requirement – In the SAS, the term SRR has been expanded to include FAA regulations, OpSpecs, Special Federal Aviation Regulations (SFARs), and Advisory Circulars.
Sub system	As part of the Master List of Functions, a sub system refers to the 3-6 groupings per system which characterize the major operations within each certificate holder system (e.g., <i>Training and Qualification</i>).
System	As part of the Master List of Functions, a system refers to the six classifications which represent the complete set of certificate holder business functions that relate to safety under Title 14 CFR and distinguish themselves by a high level of specialized training and discipline experience (e.g., <i>Organizational Management</i>). These functions define groups of interrelated processes which are a composite of people, procedures, materials, tools, equipment, facilities, and software operating in a specific environment to perform a specific task or achieve a specific purpose, support, or mission requirement.
System Model	Will describe all of the different functions a certificate holder could perform and includes the Master List of Functions and associated Specific Regulatory Requirements (SRRs).
System Safety	The application of engineering and management principles, criteria, and techniques to optimize all aspects of safety within the constraints of operational effectiveness, time, and cost throughout all phases of the system lifecycle. Specifically, system safety aims to identify, analyze, assess and control hazards and risks associated with a complete system (FAA Order 8000.369, Appendix A).